techlearn 2021 conference VIRTUAL

ROI INSTITUTE®

Show Me the Money: Moving from Impact to ROI

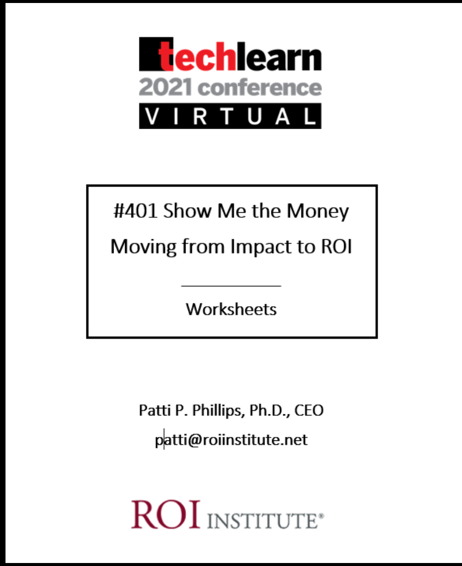
Presented by Patti P. Phillips, Ph.D., CEO, ROI Institute, Inc.

Learning Objectives

In this session you will:

1. Learn how to calculate ROI
2. Identify the improvement in business measures that result from a program
3. Annualize the improvement
4. Convert the improvement measures to money
5. Compare the annualized monetary value to the program costs

Tools for the Session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#401 Show Me the Money
Moving from Impact to ROI

Worksheets

Patti P. Phillips, Ph.D., CEO
patti@roiinstitute.net

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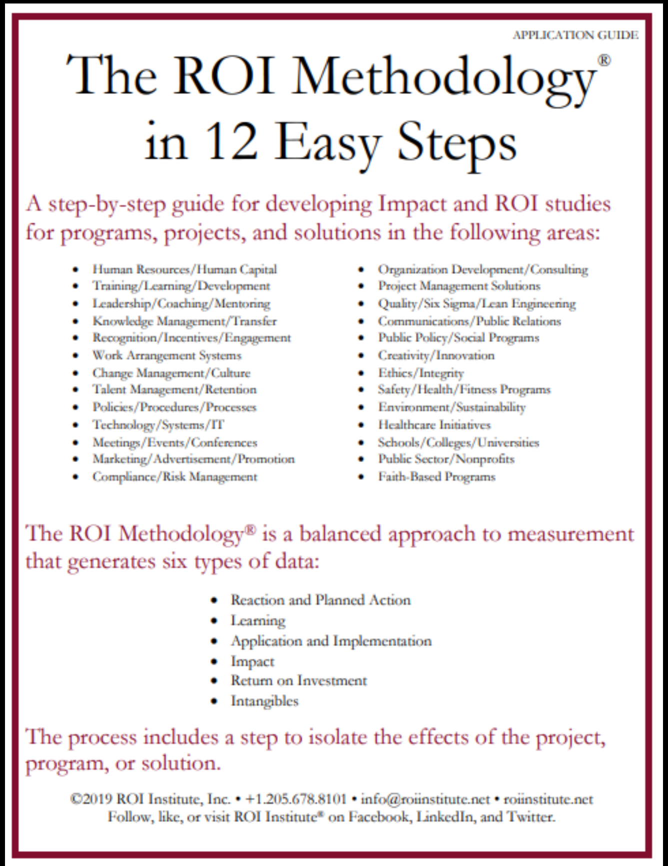
APPLICATION GUIDE

The ROI Methodology® in 12 Easy Steps

A step-by-step guide for developing Impact and ROI studies for programs, projects, and solutions in the following areas:

- Human Resources/Human Capital
- Training/Learning/Development
- Leadership/Coaching/Mentoring
- Knowledge Management/Transfer
- Recognition/Incentives/Engagement
- Work Arrangement Systems
- Change Management/Culture
- Talent Management/Retention
- Policies/Procedures/Processes
- Technology/Systems/IT
- Meetings/Events/Conferences
- Marketing/Advertisement/Promotion
- Compliance/Risk Management
- Organization Development/Consulting
- Project Management Solutions
- Quality/Six Sigma/Lean Engineering
- Communications/Public Relations
- Public Policy/Social Programs
- Creativity/Innovation
- Ethics/Integrity
- Safety/Health/Fitness Programs
- Environment/Sustainability
- Healthcare Initiatives
- Schools/Colleges/Universities
- Public Sector/Nonprofits
- Faith-Based Programs

The ROI Methodology® is a balanced approach to measurement that generates six types of data:

- Reaction and Planned Action
- Learning
- Application and Implementation
- Impact
- Return on Investment
- Intangibles

The process includes a step to isolate the effects of the project, program, or solution.

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Resources for Later

SCAN ME

Why are you pursuing this subject now? Check all that apply.

A. Top executives are requiring impact and ROI. I must pursue this.
B. I have pressure to justify my budget. I need to pursue this.
C. I know I will need to demonstrate more value in the future.
D. I want to show increased accountability for our expenditures.
E. I want to experiment with and explore new techniques to measure program success.

Return on Investment

ROI measures the amount of return relative to an investment. It indicates whether an organization is using its resources efficiently.

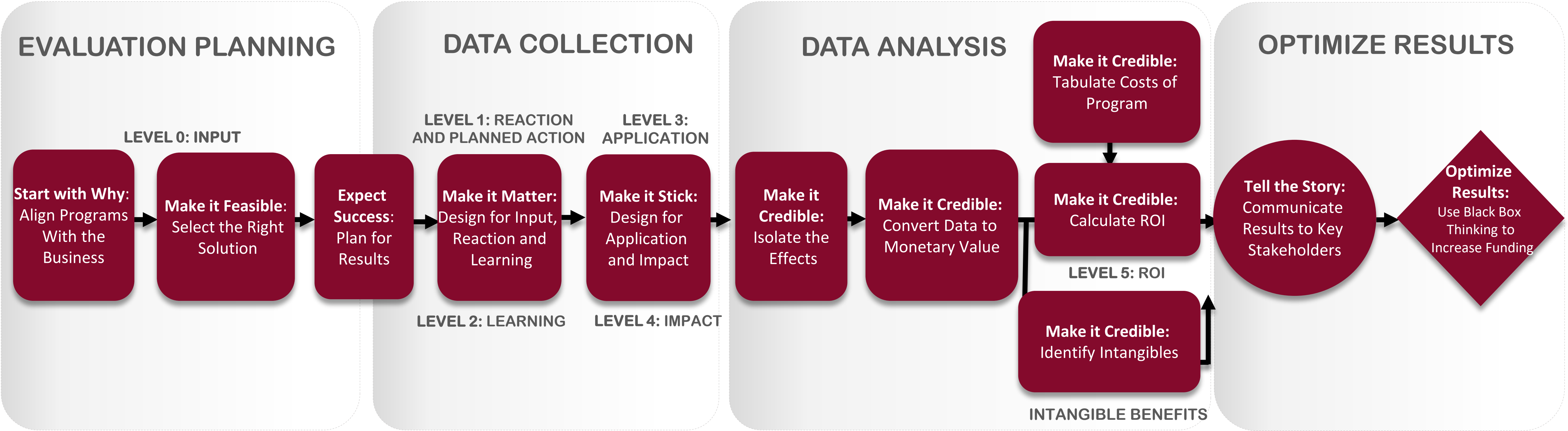
Evaluation Framework

Levels of Evaluation	Measurement Focus	Typical Measures
0. Inputs	The input into the project in terms of scope, volume, efficiencies, costs	Participants, Hours, Costs, Timing
1. Reaction & Planned Action	Measures participant satisfaction and captures planned actions, if appropriate	Relevance, Importance, Usefulness, Appropriateness, Intent to use, Motivation to act, Net Promoter Score
2. Learning	Measures changes in knowledge, skills, and attitudes	Skills, Knowledge, Capacity, Competencies, Confidence, Mindset, Contacts
3. Application & Implementation	Measures changes in behavior or actions	Extent of use, Task completion, Frequency of use, Actions completed, Behavior change, Success with use, Barriers to use, Enablers to use, Utility, Scrap
4. Impact	Measures changes in impact variables	Productivity, Revenue, Quality, Time, Efficiency, Customer Satisfaction, Patient Satisfaction, Employee Engagement, Talent Mobility, Innovation
5. Return on Investment	Compares project benefits to the costs	Benefit-Cost Ratio (BCR), ROI%, Payback Period

Katzell developed four steps of training evaluation; Kirkpatrick wrote about four steps of training evaluation; Phillips added economic theory and operationalized the framework by adding process and standards and applying it in practice.

The ROI Methodology Process Model

Designing for the Delivery of Business Results



ROI INSTITUTE®

Twelve Guiding Principles of ROI

1. When conducting a higher-level evaluation, collect data at lower levels.
2. When planning a higher-level evaluation, the previous level of evaluation is not required to be comprehensive.
3. When collecting and analyzing data, use only the most credible sources.
4. When analyzing data, select the most conservative alternative for calculations.
5. Use at least one method to isolate the effects of a project.
6. If no improvement data are available for a population or from a specific source, assume that little or no improvement has occurred.
7. Adjust estimates of improvement for potential errors of estimation.
8. Avoid use of extreme data items and unsupported claims when calculating ROI.
9. Use only the first year of annual benefits in ROI analysis of short-term solutions.
10. Fully load all costs of a solution, project, or program when analyzing ROI.
11. Intangible measures are defined as measures that are purposely not converted to monetary values.
12. Communicate the results of ROI Methodology to all key stakeholders.

Reaction

Learning

Application

Isolate the Effects

Impact

Convert Data to Monetary Value
Tabulate Fully-Loaded Costs

ROI

Intangible Benefits

Evaluation Framework

Levels of Evaluation	Measurement Focus	Typical Measures
0. Inputs	The input into the project in terms of scope, volume, efficiencies, costs	Participants, Hours, Costs, Timing
1. Reaction & Planned Action	Measures participant satisfaction and captures planned actions, if appropriate	Relevance, Importance, Usefulness, Appropriateness, Intent to use, Motivation to act, Net Promoter Score
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Katzell developed four steps of training evaluation; Kirkpatrick wrote about four steps of training evaluation; Phillips added economic theory and operationalized the framework by adding process and standards and applying it in practice.

What is ROI?

$$\textbf{BCR} = \frac{\text{Program Benefits}}{\text{Program Costs}}$$

$$\textbf{ROI} = \frac{\text{Net Program Benefits}}{\text{Program Costs}} \text{ X } 100$$

ROI Calculation Practice 1 Post your answer in chat!

Reduce Safety Incidents (1st year) = $750,000
Program Cost (25 participants) = $425,000

BCR = ______________________ **=**

ROI = ______________________ X 100 =

ROI Calculation Answer

Reduce Safety Incidents (1st year) = $750,000

Program Cost (25 participants) = $425,000

$$\textbf{BCR} = \frac{\$750{,}000}{\$425{,}000} =$$

$$\textbf{ROI} = \frac{\$750{,}000 - \$425{,}000}{\$425{,}000} \times 100 =$$

ROI Calculation Answer

Reduce Safety Incidents (1st year) = $750,000

Program Cost (25 participants) = $425,000

$$\textbf{BCR =} \frac{\$750{,}000}{\$425{,}000} \textbf{= 1.76}$$

$$\textbf{ROI =} \frac{\$750{,}000-\$425{,}000}{\$425{,}000} \text{ X } 100 \textbf{ = 76\%}$$

Sometimes you will see

Reduce Safety Incidents (1st year) = $750,000
Program Cost (25 participants) = $425,000

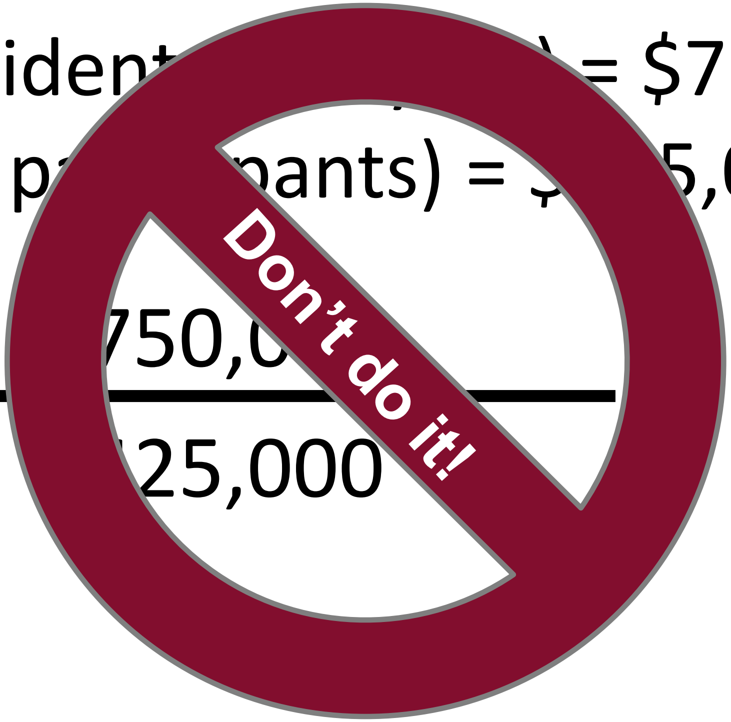
$$\textbf{BCR} = \frac{\$750{,}000}{\$425{,}000} = 1.76 \times 100 = \textbf{176\%}$$

Sometimes you will see

Reduce Safety Incident ...) = $750,000

Program Cost (25 pa ... pants) = $ ... 5,000

BCR = 750,0 ... / 25,000 ... 1.76 X 100 = **176%**



ROI Calculation Answer

Reduce Safety Incidents (1st year) = $750,000
Program Cost (25 participants) = $425,000

$$\textbf{BCR} = \frac{\$750{,}000}{\$425{,}000} = \textbf{1.76}$$

$$\textbf{ROI} = \frac{\$750{,}000 - \$425{,}000}{\$425{,}000} \times 100 = \textbf{76\%}$$

ROI Calculation Practice 2 Post your answer in chat!

Increase Store Sales (1st year) = $2,750,000

Gross profit on sales is 20%

Program Cost (25 participants) = $425,000

$$\text{ROI} = \frac{}{} \times 100 =$$

Sometimes you will see

Increase Store Sales (1st year) = $2,750,000

Gross profit on sales is 20%

Program Cost (25 participants) = $425,000

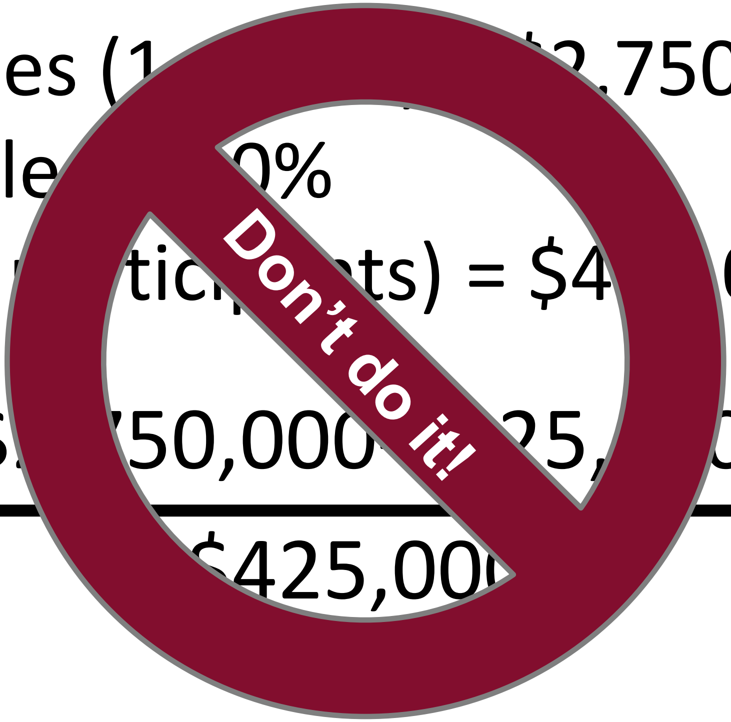
$$\textbf{ROI =} \frac{\$2,750,000-\$425,000}{\$425,000} \text{ X } 100 = \textbf{547\%}$$

Sometimes you will see

Increase Store Sales (1 … 2,750,000

Gross profit on sale … 0%

Program Cost (25 … tic … ts) = $4 … 000



ROI = $ … 750,000 … 25, … 0 / … 425,00 … X 100 = **547%**

Sometimes you will see

Increase Store Sales (1st year) = $2,750,000
Gross profit on sales is 20%
Program Cost (25 participants) = $425,000

$$\textbf{ROI} = \frac{\$550{,}000-\$425{,}000}{\$425{,}000} \times 100 = \textbf{29.4\%}$$

What is ROI?

$$\textbf{BCR} = \frac{\text{Program Benefits}}{\text{Program Costs}}$$

$$\textbf{ROI} = \frac{\text{Net Program Benefits}}{\text{Program Costs}} \text{ X } 100$$

5 Steps to the Money

1. Define the unit of measure
2. Determine the value of the measure (V)
3. Determine the change in performance ($\triangle P$)
4. Determine the annual change in performance ($A\triangle P$)
5. Calculate the annual monetary benefit ($A\triangle P \times V$)

01. Define unit of measure.

The standard unit by which a quantity is measured.

Define the Unit of Measure

If this	Then this
Increase sales to new customer	1 sale
Reduce turnover of mid-level managers	1 turnover statistic
Reduce grievances regarding hostile work environment	1 complaint
Reduce time in meetings	1 hour
Increase time in knowledge management system	1 minute

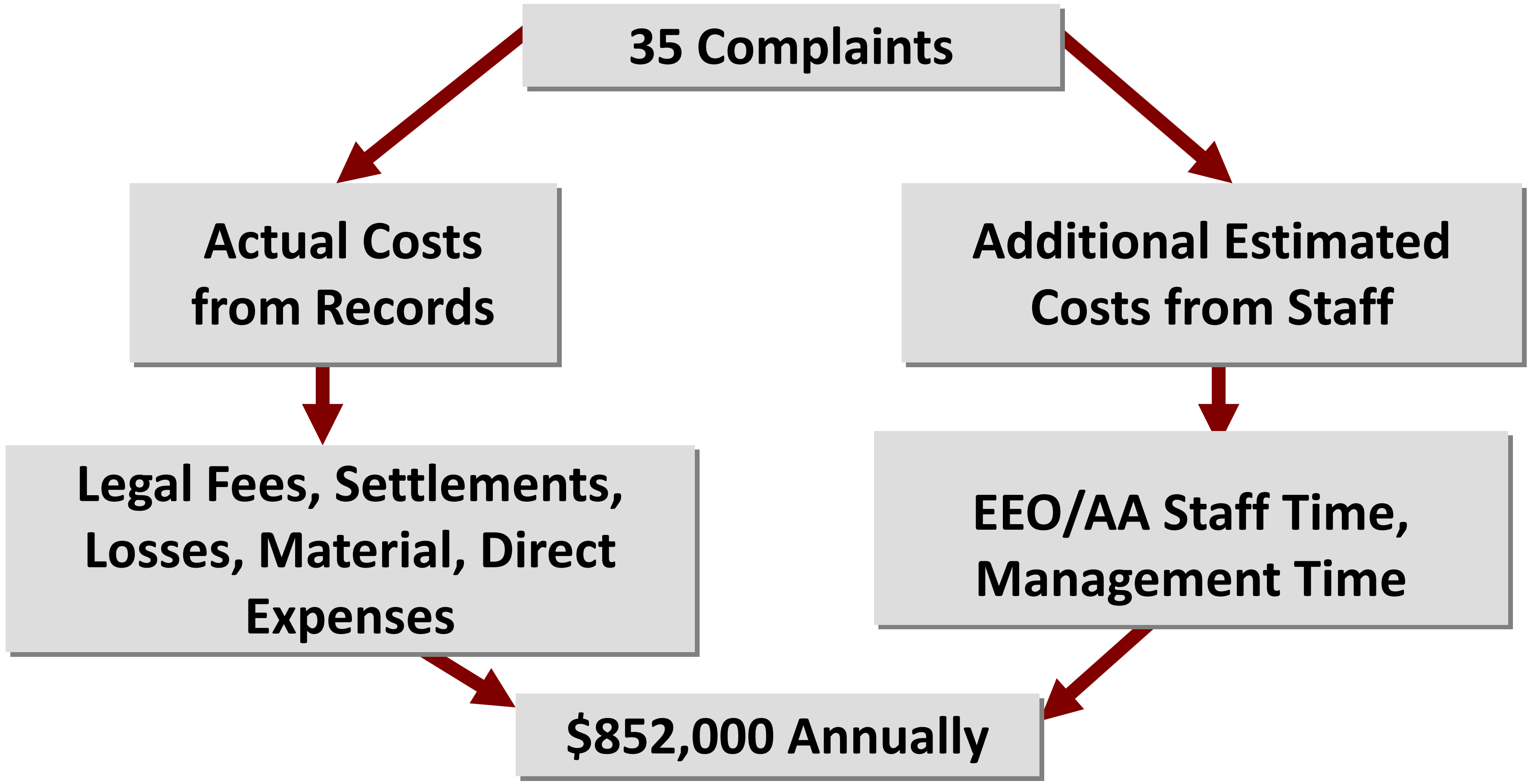
02. Determine the Value.

The monetary value of the measure of interest.

Determine the Value of the Measure

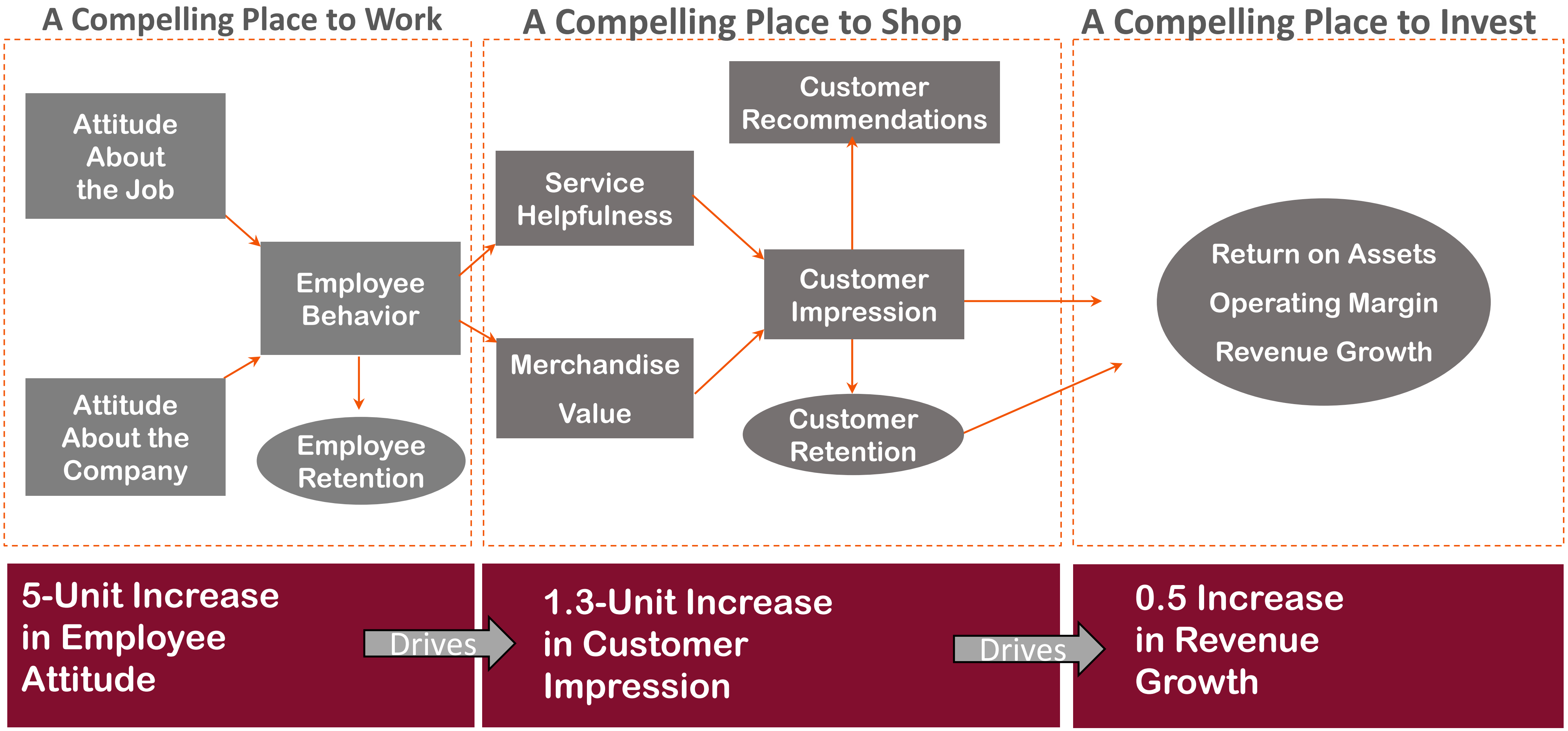
- Converting output to contribution – standard value
- Converting the cost of quality – standard value
- Converting employee’s time – standard value
- Using historical costs/existing data
- Using internal and external experts
- Using data from external databases
- Linking with other measures
- Using participants’ estimates
- Using supervisors’ and managers’ estimates
- Using staff estimates

Cost of a Complaint



Cost per complaint: $\dfrac{\underline{\$852{,}000}}{35} = \$24{,}343$

Linking with other measures



Rucci, A. J., Kirn, S. P., and Quinn, R. T. (January – February 1998) The Employee-Customer-Profit Chain at Sears. Harvard Business Review. Retrieved at https://hbr.org/1998/01/the-employee-customer-profit-chain-at-sears

Estimations

- Identify the most credible source(s) of data.
- Ask them three questions:
    1. What happens when?
    2. Given what happens when, how much does it cost (or is it worth)?
    3. How confident are you?

Example: 1 Unexpected Absence

Most Credible Source: Supervisors

Data Collection Approach: Focus Group

Three questions (round robin format):

1. What happens when someone does not show up for work?
2. Given what you know about what happens, what does it cost for one person not to show up on one day?
3. How confident are you in your estimate?

Example: Unexpected Absenteeism

Supervisor	Estimate Value	Confidence	Adjusted Value
1	$1,500	90%	
2	$2,000	80%	
3	$1,800	85%	
4	$2,100	75%	
5	$1,000	95%	
Average the estimates of the five supervisors:			Post your answer in chat!

Example: Unexpected Absenteeism

Supervisor	Estimate Value	Confidence	Adjusted Value
1	$1,500	90%	$1,350
2	$2,000	80%	
3	$1,800	85%	
4	$2,100	75%	
5	$1,000	95%	
Monetary value of an absence			

Example: Unexpected Absenteeism

Supervisor	Estimate Value	Confidence	Adjusted Value
1	$1,500	90%	$1,350
2	$2,000	80%	$1,600
3	$1,800	85%	
4	$2,100	75%	
5	$1,000	95%	
Monetary value of an absence			

Example: Unexpected Absenteeism

Supervisor	Estimate Value	Confidence	Adjusted Value
1	$1,500	90%	$1,350
2	$2,000	80%	$1,600
3	$1,800	85%	$1,530
4	$2,100	75%	
5	$1,000	95%	
Monetary value of an absence			

Example: Unexpected Absenteeism

Supervisor	Estimate Value	Confidence	Adjusted Value
1	$1,500	90%	$1,350
2	$2,000	80%	$1,600
3	$1,800	85%	$1,530
4	$2,100	75%	$1,575
5	$1,000	95%	
Monetary value of an absence			

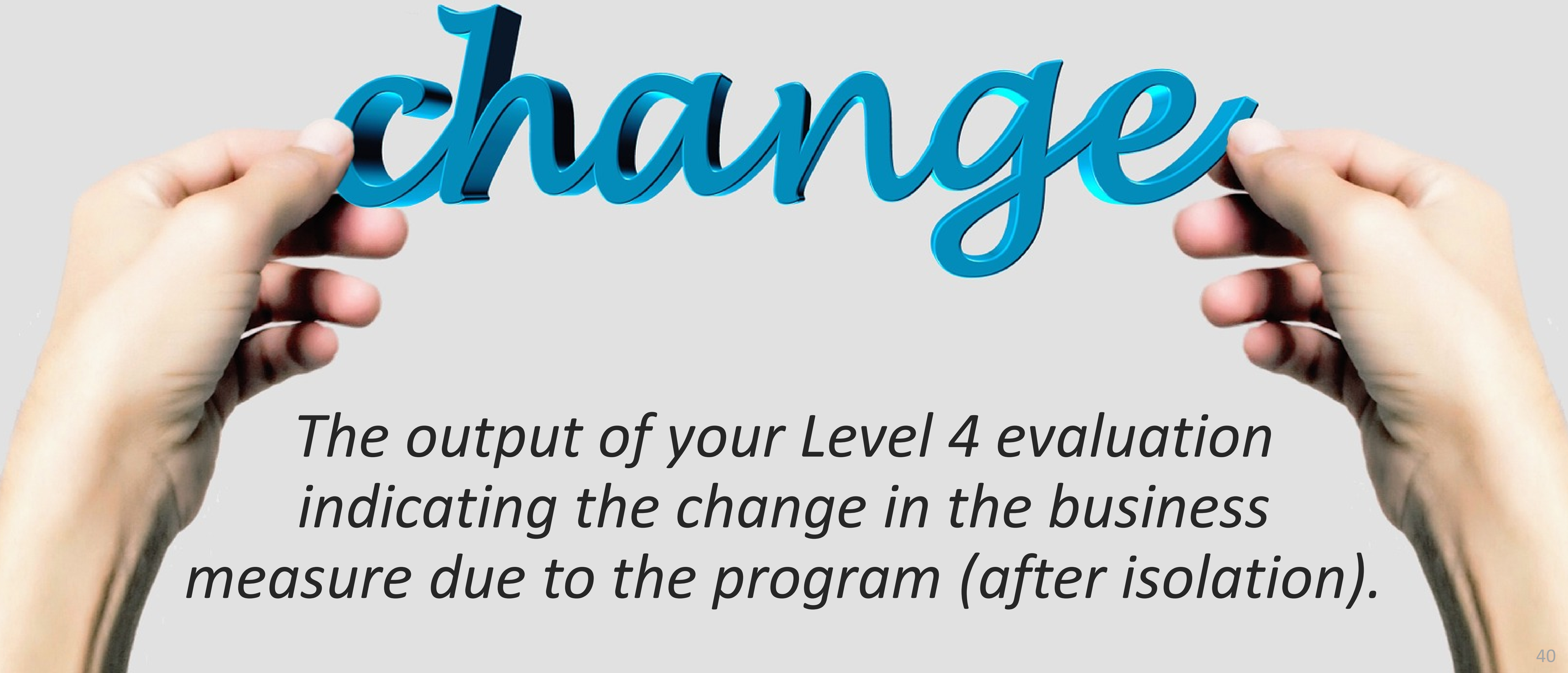
Example: Unexpected Absenteeism

Supervisor	Estimate Value	Confidence	Adjusted Value
1	$1,500	90%	$1,350
2	$2,000	80%	$1,600
3	$1,800	85%	$1,530
4	$2,100	75%	$1,575
5	$1,000	95%	$950
Monetary value of an absence			

Example: Unexpected Absenteeism

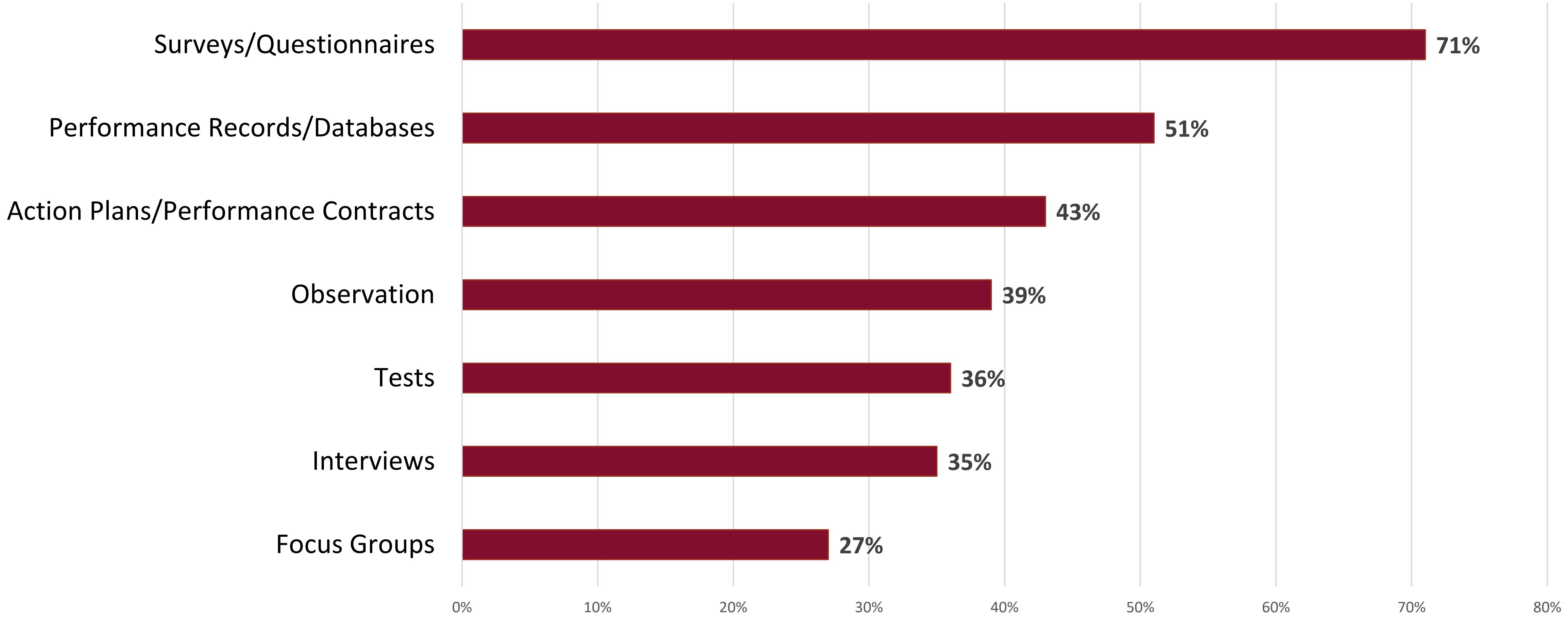
Supervisor	Estimate Value	Confidence	Adjusted Value
1	$1,500	90%	$1,350
2	$2,000	80%	$1,600
3	$1,800	85%	$1,530
4	$2,100	75%	$1,575
5	$1,000	95%	$950
		Average estimates of the five supervisors:	**$1,401**

03. DETERMINE THE CHANGE IN PERFORMANCE.



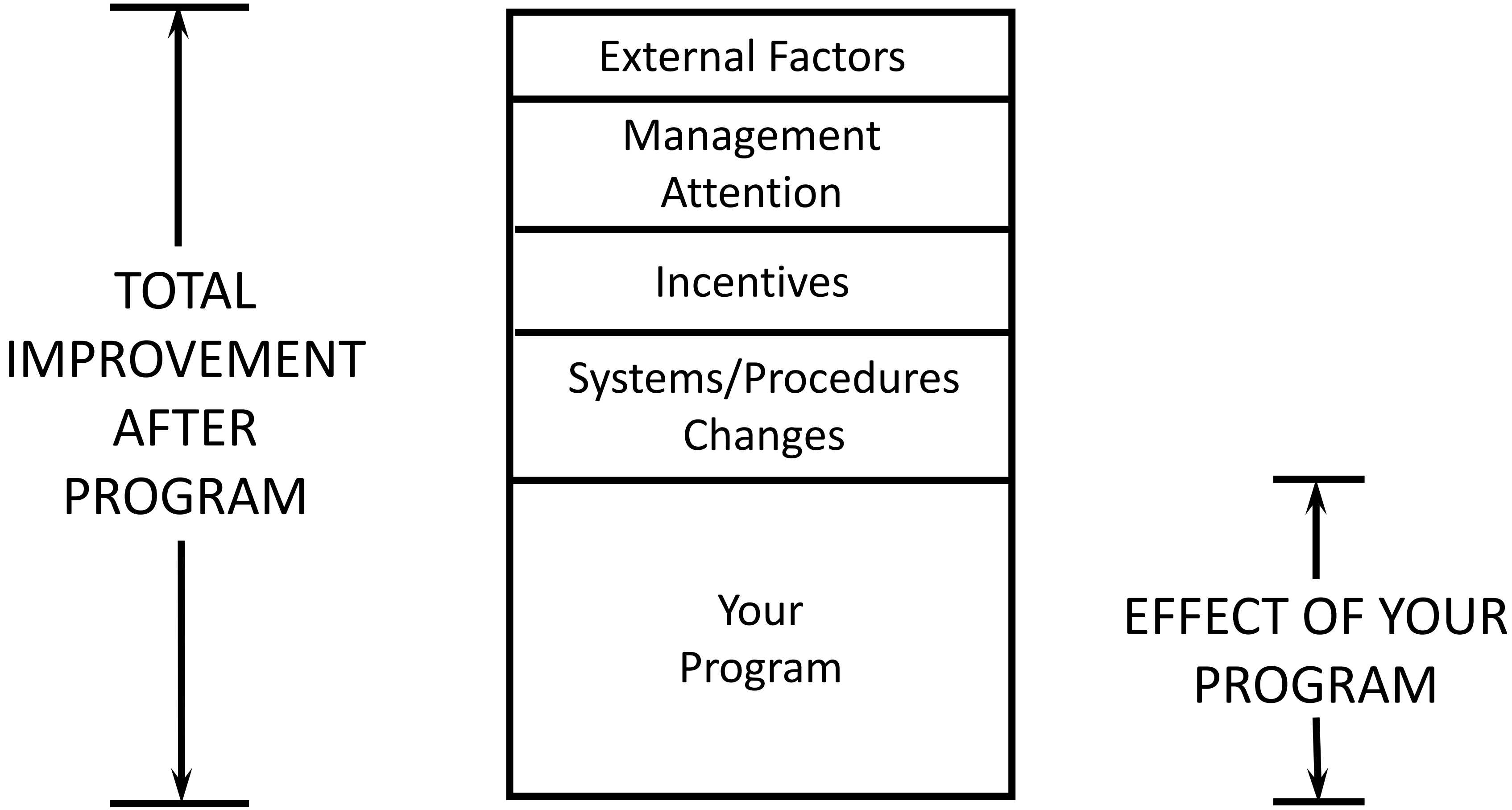
The output of your Level 4 evaluation indicating the change in the business measure due to the program (after isolation).

Data Collection Methods

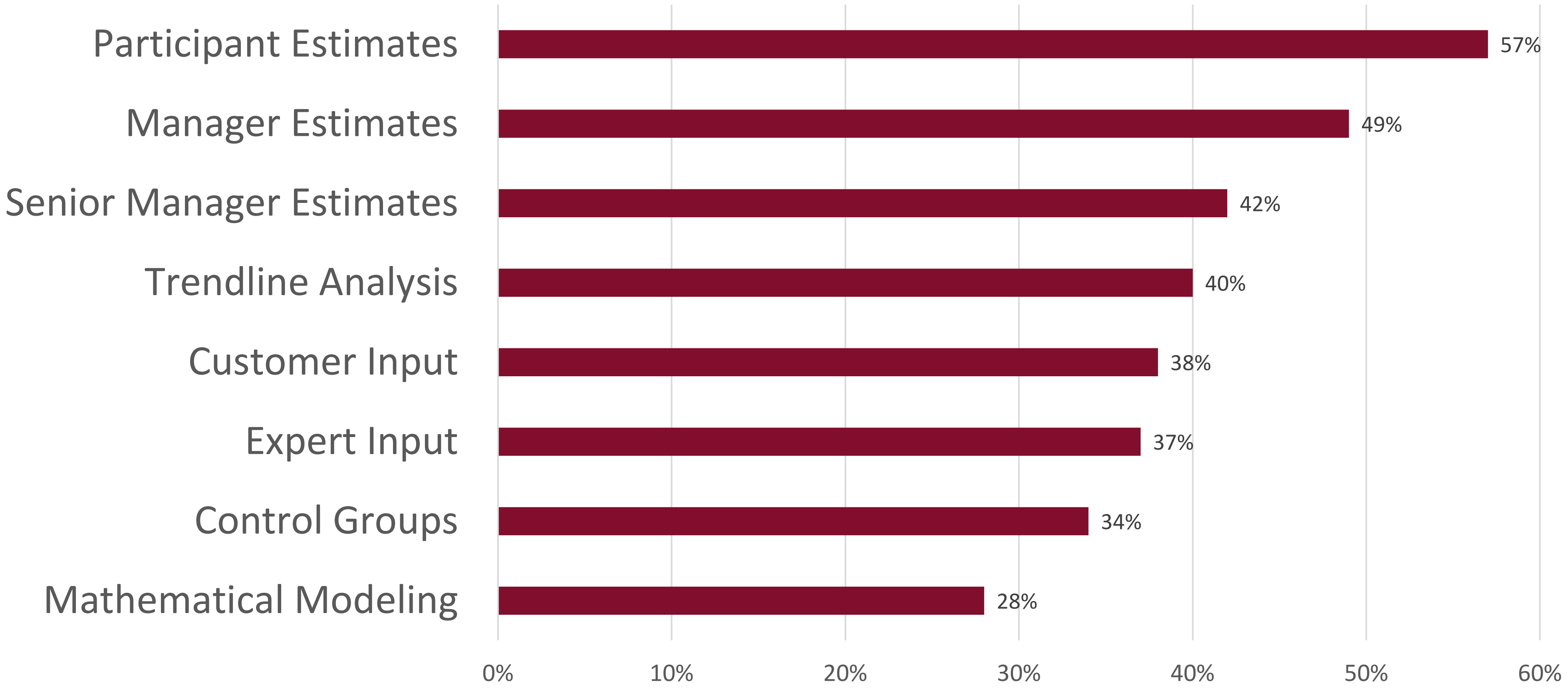


*Survey of Users, n = 246

Multiple Factors Contribute to Changes in Performance



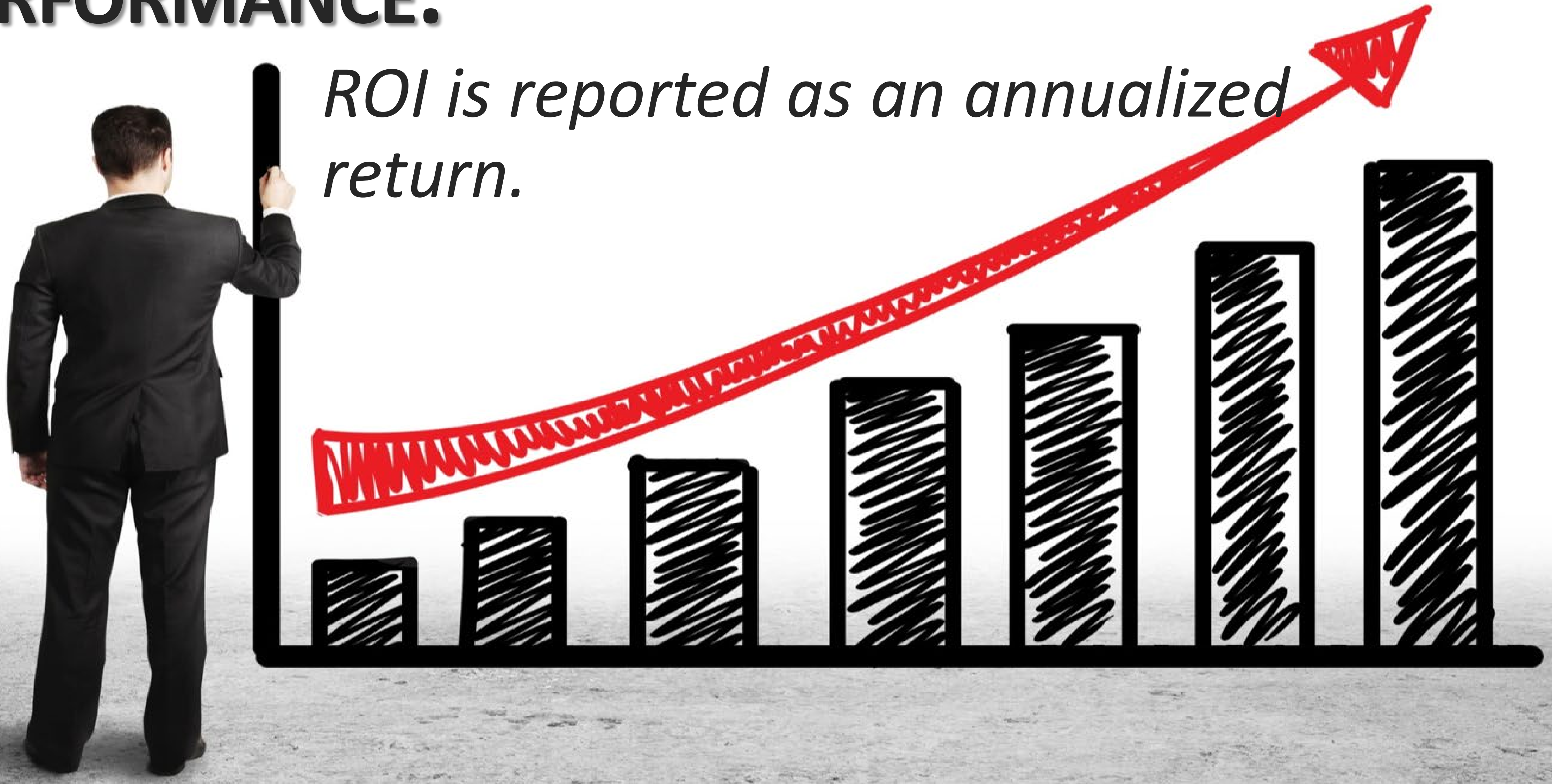
Isolation Methods



*Survey of Users, n = 246

04. DETERMINE THE ANNUAL CHANGE IN PERFORMANCE.

ROI is reported as an annualized return.



Determine the Annual Change in Performance

If this	Then this
Grievances decrease 7 per month	Grievances decrease 84 per year (7 X 12)
Absenteeism decreases 1.2% and there are 120 people working 240 days per year	Absenteeism decreases 345.6 per year (.012 x 120 x 240*)
Sales increase $1,250 per week	Sales increase $60,000 per year ($1,250 x 48 weeks*)

***Varies based on organization practice.**

05. Calculate the annual monetary benefit.

Multiply the annual change by the value of one unit.

Calculate the Annual Monetary Benefit

If this	then this	and this	then this
Grievances decrease 7 per month	Grievances decrease 84 per year (7 X 12)	Value = $6500	**$546,000** (84 x $6500)
Absenteeism decreases 1.2% and there are 120 people working 240 days per year	Absenteeism decreases 345.6 per year (012 x 120 x 240*)	Value = $105	**$36,288** (345.6 x $105)
Sales increase $1,250 per week	Sales increase $60,000 per year ($1,250 x 48 weeks)	Value = 15% profit	**$9,000** ($60,000 x .15)

5 Steps to the Money

1. Define the unit of measure
2. Determine the value of the measure (V)
3. Determine the change in performance ($\triangle P$)
4. Determine the annual change in performance ($A\triangle P$)
5. Calculate the annual monetary benefit ($A\triangle P$ x V)

Example 1: Using Expert Input

5

1. Unit of Measure: 1 Grievance
2. V = \$6,500 Director of Nursing and HR Expert
3. $\triangle$P = 7 out of 10 grievances prevented per month
4. A$\triangle$P =
5. A$\triangle$P x V =

Post your answer in chat!

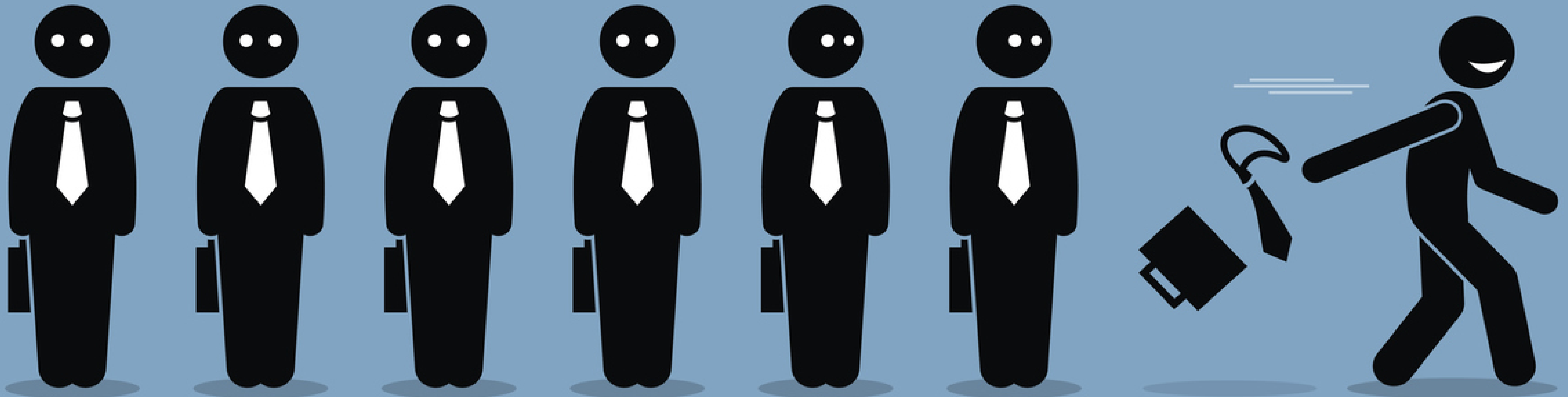
5

Example 1: Using Expert Input

1. Unit of Measure: 1 Grievance
2. V = \$6,500 Director of Nursing and HR Expert
3. $\triangle P$ = 7 per month due to program
4. $A\triangle P$ = 84
5. $A\triangle P \times V = 84 \times \$6,500 = \$546,000$

Example 2: Turnover of Middle Managers: A Word Problem

Your organization is experiencing a high level of turnover of middle managers who are paid $75,000 per year (fully-loaded). To capture the value of turnover for this group, you rely on a database. The database provides you with various job groups and a range for the cost of turnover for each group. A program was implemented to reduce the turnover. One year after the program, you found that turnover decreased by 10 for the year – a direct result of the program. Using your five steps, the guiding principles, and the Turnover Cost Summary, calculate the annual monetary value of the reduction in turnover of middle managers who are paid $75,000 per year.



Turnover Cost Summary

Job Type/Category	Turnover Cost Ranges*
Entry level – hourly, non-skilled	30-50%
Service / Production workers – hourly	40-70%
Skilled hourly	75-100%
Clerical / Administrative	50-80%
Professional	75-125%
Technical	100-150%
Engineers	200-300%
Specialists	200-400%
Supervisors / Team Leaders	100-150%
Middle Managers	125-200%

*Percentage of salary.

5

Example 3: Using Database

1. Unit of Measure: 1 Turnover Statistic – Middle Manager paid $75,000 per year
2. V =
3. △P = 10 per year due to the program
4. A△P =
5. A△P x V =

Post your answer in chat!

5

Example Using Database

1. Unit of Measure: 1 Turnover Statistic – Middle Manager paid $75,000 per year
2. V = 125% of salary or 1.25 x $75,000 = $93,750
3. $\triangle$P = 10 per year due to the program
4. A$\triangle$P = 10 per year due to the program
5. A$\triangle$P x V = 10 x $93,750 = $937,500

Typical Intangible Benefits

- Adaptability
- Awards
- Agency brand
- Career minded
- Caring
- Collaboration
- Communication
- Conflicts
- Corporate social responsibility
- Decisiveness
- Engagement
- Image
- Innovation
- Job satisfaction
- Leadership
- Networking
- Organizational climate
- Organizational commitment
- Sustainability
- Stress
- Talent
- Teamwork

What is ROI?

$$\textbf{BCR} = \frac{\text{Program Benefits}}{\text{Program Costs}}$$

$$\textbf{ROI} = \frac{\text{Net Program Benefits}}{\text{Program Costs}} \text{ X } 100$$

Fully Loaded Cost

"When in doubt, put it in."

The process should withstand even the closest scrutiny in terms of its credibility.

DIRECT

- Program Materials
- Instructor / facilitator
- Facilities
- Travel, lodging, meals

INDIRECT

- Needs Assessment (Prorated)
- Program Development (Prorated)
- Participant Time (salaries & benefits)
- Administrative/overhead
- Evaluation

See also page 21 in AG

Healthcare, Inc.

Data Collection Techniques

- (L1) Questionnaire – end of program
- (L2) Knowledge Assessment; Skill Practice – during program
- (L3) Self Assessment Questionnaire – 6 months after program
- (L3) Employee Survey (25% Sample) – 6 months after program
- (L4) Complaint and Turnover Records – 12 months after program

Isolation Techniques

- Complaints – Trend Line Analysis
- Turnover – Forecasting

Data Conversion Techniques

- Complaints – Historical costs and input from experts (internal EEO/AA staff)
- Turnover – External studies within industry

Program Costs

- Fully loaded including needs assessment, development, coordination, salaries and benefits of initial meeting, and evaluation
- Total Costs: $277,987

Benefits (Isolated)

- **Complaints**
  - Value of one complaint: $24,343
  - Prevented over one year: 14.8
- **Turnover**
  - Value of one turnover statistic: $20,887
  - Prevented over one year: 136

Post your answer in chat!

What is ROI?

$$\text{BCR} = \frac{\text{Program Benefits}}{\text{Program Costs}}$$

$$\text{ROI} = \frac{\text{Net Program Benefits}}{\text{Program Costs}} \text{ X } 100$$

Healthcare, Inc.

Program Costs

- Fully loaded including needs assessment, development, coordination, salaries and benefits of initial meeting, and evaluation
- Total Costs: $277,987

Benefits (Isolated)

- **Complaints**
  - Value of one complaint: $24,343
  - Prevented over one year: 14.8
  - 14.8 x $24,343 = $360,276.40
- **Turnover**
  - Value of one turnover statistic: $20,887
  - Prevented over one year: 136
  - 136 x $20,887 = $2,840,632

$$\textbf{ROI} = \frac{\overbrace{(\$360{,}276.40 + \$2{,}840{,}632)}^{\text{(Complaints + Turnover)}} - \$277{,}987}{\$277{,}987} \times 100 = 1{,}051\%$$

Next Steps

1. Assess your readiness for ROI.
2. Identify stakeholder needs.
3. Identify programs suitable for impact and ROI analysis.
4. Build capability in measurement, evaluation, and ROI.
5. Design programs and projects with ROI in mind.

Remember, when it comes to delivering results:

- Hope is not a strategy.
- Luck is not a factor.
- Doing nothing is not an option.

Change is inevitable.

Progress is optional.

Let's have a conversation.

Schedule a time that works for you.

https://calendly.com/pattiphillips/connect

patti@roiinstitute.net

ROI Institute Academy

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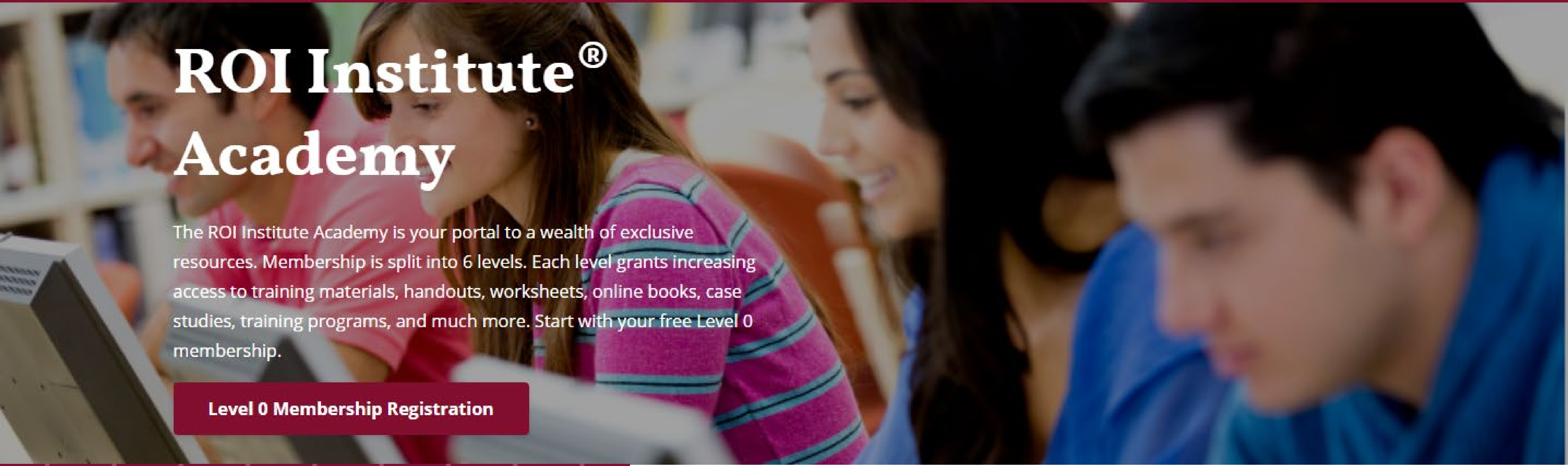

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Join **Level 0 Membership** at no cost to gain access to resource materials, tools, and case studies.

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Resources for Later

SCAN ME

ROI CERTIFICATION®

SCHEDULED EVENTS

November 29-December 10, 2021 — Live Virtual

January 10-14, 2022 — Focused on Healthcare

January 17-28, 2022 — Live Virtual

February 28-March 4, 2022 — Orlando, FL

April 11-15, 2022 — New Orleans, LA

May 9-13, 2022 — Orlando, FL

June 13-17, 2022 — Salt Lake City, Utah

July 11-15, 2022 — Williamsburg, VA

July 25-29, 2022 — Denver, CO

August 15-19, 2022 — San Diego, CA

September 12-16, 2022 — Boston, MA

October 10-14, 2022 — Seattle, WA

November 14-18, 2022 — Atlanta, GA

December 5-9, 2022 — Charlotte, NC

WHAT IS ROI CERTIFICATION?

ROI Certification is a globally renowned process focused on measuring the true value of tough-to-measure initiatives using the ROI Methodology®. Participating in ROI Certification is the most comprehensive way to gain the skills needed to evaluate major programs and to report the most credible results that drive organizational improvement.

Email: info@roiinstitute.net

Enroll: http://bit.ly/ROICertification

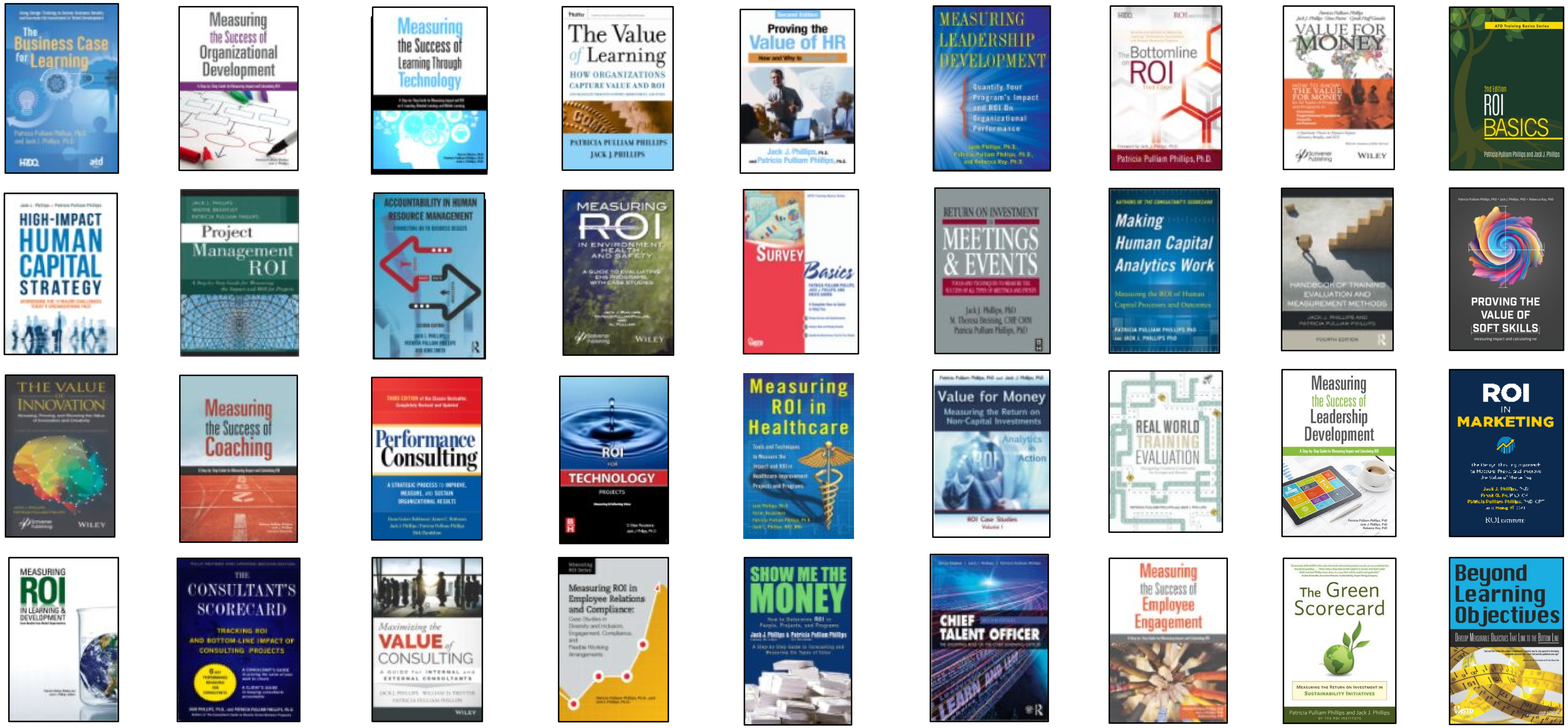
Call: +1 205.678.8101

ROI INSTITUTE®

Patti P. Phillips, Ph.D.

- Author, Educator, Consultant, Coach
- CEO, ROI Institute, Inc.
- Chair, i4cp People Analytics Board
- Chair, Center for Talent Reporting Board
- Principal Research Fellow, The Conference Board
- Member, UN Institute for Training and Research Board of Trustees
- Member, International Federation of Training and Development Board
- Fellow, ATD Certified Professional in Talent Development

The need to demonstrate Impact and ROI goes beyond HR and L&D.



There are more than 75 publications to support the ROI Methodology.